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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/587,460	07/24/2006	Louis Guillou	5284-75PUS	2714	
Thomas Lange	7590 10/30/2008	EXAM	EXAMINER		
Cohen, Pontan	i, Lieberman & Pavane	SQUIRES, BRETT S			
551 Fifth Aver New York, NY	nue, Suite 1210 7 10176		ART UNIT	PAPER NUMBER	
			2431		
			MAIL DATE	DELIVERY MODE	
			10/20/2009	DADED	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.	Applicant(s)		
10/587,460	GUILLOU ET AL.		
Examiner	Art Unit		
BRETT SQUIRES	2431		

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address 
Period for Renty

earned	patent term	adjustment.	See 37	CFR	1./04(t

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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of times may be available under the provisions of 37 CFR 1.38(a). In no event, however, may a reply be timely filed  - If NO period for reply is specified above, the maximum situationy period will apply and will expire SIX (8) MONTHS from the maining date of this communication.  - Failure to reply within the set or extended period for reply will by shade, cause the application to become AMADONED (35 U.S.C, § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patter therm adjustment. See 37 CFR 1.74(b).
Status
1) Responsive to communication(s) filed on 24 July 2006.
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4) Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) is/are withdrawn from consideration.
5)⊠ Claim(s) <u>1-18.20 and 22</u> is/are allowed.
6)⊠ Claim(s) <u>21</u> is/are rejected.
7)⊠ Claim(s) <u>19</u> is/are objected to.
8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9)☐ The specification is objected to by the Examiner.
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)

- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
  3) Historration Disclosure Statement(s) (PTO/SE/CS)
  - Paper No(s)/Mail Date 07/24/06 and 12/18/06.

- Paper No(s)/Mail Date.
- 5) Notice of Informal Patent Application.
- 6) Other:

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### Claim Objections

 Claim 19 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim.
 See MPEP § 608.01(n). Accordingly, the claim 19 has not been further treated on the merits.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 recites "a computer program containing instructions," this recitation is functional descriptive material and does not fall into at least one of the four statutory classes defined by 35 U.S.C. 101. A computer program, such as the recited computer program containing instructions, only imparts functionality when employed as a computer component, such as when a computer program is recorded on a computer readable medium. If a claim covers material not found in any of those four categories, then the claim falls outside the plainly expressed scope of 35 U.S.C. 101, even if the subject matter is otherwise new and useful. See In re Nuiiten 84 USPQ2d 1495 (Fed. Cir. 2007)

#### Allowable Subject Matter

 Claims 1-18, 20, and 22 are allowed over the prior art. The following is an examiner's statement of reasons for allowance: the most relevant reference Guillou L. Application/Control Number: 10/587,460

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C. et al. "Cryptographic Authentication Protocols for Smart Cards," discloses GQ2 asymmetric authentication based on integer factorization (See page 445 col. 2 through page 448 col. 2). The GQ2 asymmetric authentication has a modulus n used for an RSA signature with v, where v is determined by  $v=2^k$  with k=>2. The GQ2 asymmetric authentication does not disclose using  $v=2^{b+k}$  where k is a strictly positive integer and  $b=\max(b1,...,bf)$ , where bj (where j=1,...f) is the highest integer such that  $(pj-1)/2^{bj-1}$  is even.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRETT SQUIRES whose telephone number is (571) 272-8021. The examiner can normally be reached on 9:30am - 6:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/Christopher A. Revak/ Primary Examiner, Art Unit 2431